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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Richard Williams

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TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER

BAYARD, EMMANUEL

ART UNIT

PAPER NUMBER

2611

NOTIFICATION DATE

DELIVERY MODE

07/13/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com
uspto@dlemail.itg.ti.com

Office Action Summary	Application No. 10/026,319	Applicant(s) WILLIAMS ET AL.	
	Examiner Emmanuel Bayard	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-22 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-21 is/are allowed.
- 6) ☒ Claim(s) 1, 4-14, 22 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This in response to RCE filed on 5/30/07 in which claims 1,4-22 and 25 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,4-8, 13-14, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pulley et al U.S. Patent No 6,754,292 B1 in view of Ogino U.S. Patent No 6,842,478 B1.

3. As per claim 1, Pulley et al teaches a method of detecting packets in a communications channel comprising: (a) sampling the communications channel at a first sampling rate, producing a sequence of samples (see fig. 1 element 10 and col. 1, lines 38-40 and col.2, lines 8-25); (b) correlating at least one sample of the sequence of samples from step a (see fig.1 elements 14, 16, and co1.1, lines 43-50 and co1.2, lines 32-35 and co1.3 lines 1-22) with one or more samples of the sequence of samples from step a to generate a plurality of correlation results; computing a correlation (see fig.1 see elements 20, 24, 22 or 32, 34, 36, 28 and co1.2, lines 45-67 and col.3, lines 15-23) value from the plurality of correlation results; (c) comparing the correlation result with a threshold (see co1.1, lines 52-54 and col.3, lines 24-30 and col.4, lines 5-19); sampling

the channel at a second sampling rate based on and changed by the result of the comparison (see fig.1 element 42 and col.1, lines 54-56 and co.3, lines 31-38).

However Pulley does not teach wherein the second sampling rate has a different power level than the first sampling rate.

Ogino teaches wherein the second sampling rate has a different power level than the first sampling rate (see col.2, lines 55-67 and col.3, lines 40-45 and col.4, lines 15-20 and col.13 and lines 38-45).

It would have been obvious to one of ordinary skill in the art to implement the teaching of Ogino into Pulley as to reduce the power consumption of the A/D converter as taught by Ogino (See col.13, lines 45-47)

As per claim 4, Since Pulley teaches the sampling rate of the receiver is exactly synchronized with the sampling rate of the transmitted signal, which inherently includes an encoded data (see col.4, lines 5-10). Therefore Pulley in combination with Ogino would teach the first sampling rate is sufficient to (recover) data encoded in the packet as to accurately determine the sampling rate of the incoming signal.

As per claim 5, Pulley teaches wherein the second sampling rate is greater than the first sampling rate (see col.3, lines 34-38).

As per claim 6, Pulley inherently teaches wherein the second sampling rate is an integer multiple of the first sampling rate (see col.3, lines 34-38).

As per claim 7, Since Pulley teaches the sampling rate of the receiver is exactly synchronized with the sampling rate of the transmitted signal, which inherently includes an encoded data (see col.4, lines 5-10). Therefore Pulley in combination with Ogino

would teach the second is an integer multiple of a minimum sampling rate required to accurately recover data encoded in the packet.

As per claim 8, Pulley teaches wherein the second sampling step occurs only if the correlation result exceeds the threshold (see col.4, lines 1-20).

As per claim 13, Pulley teaches wherein the correlation step is performed after a new sample is produced (see col.3, lines 15-35).

As per claim 14, As per claim 14, Pulley inherently teaches wherein the correlation step is performed after a specified number of new samples are produced (see col.3, lines 15-35). Therefore Pulley in combination with Ogino would teach such correlating step to accurately recover data encoded in the packet.

As per claim 22, Pulley teaches a first plurality of samples is correlated with one or more plurality of samples generate the plurality of correlation results (see fig.1 elements 14, 16). Therefore Pulley in combination with Ogino would teach such correlating step to accurately recover data encoded in the packet.

As per claim 25, Pulley teaches wherein the computing the correlation value comprises: summing the plurality of correlation results (see fig.3 element 28).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pulley et al U.S. patent No 6,754,292 in view of Ogino U.S. Patent NO 6,842,478 B1 and in further view of Miya U.S. Patent No 5,818,869.

As per claims 9 and 12, Pulley and Ogino in combination teach all the features of the claimed invention except decoding the packet; transmitting modulated spreading codes is the same as the claimed (processing any data encoded in the packet) since a decoding step is achieved in the receiver.

Miya et al does teach decoding the packet (see col.3, lines 43-50 and col.4, lines 62-67 and col.6, lines 11-15); transmitting modulated spreading codes is the same as the claimed (processing any data encoded in the packet) since a decoding step is achieved in the receiver (see col.2, lines 25-26 and col.3, lines 53-55) in the packet.

It would have been obvious to one of ordinary skill in the art to implement the teaching of Miya into Pulley and Ogino combination as to accurately measure the BER of the sampling position as taught by Miya (see col.6, lines 6-20).

As per claim 10, Pulley, Ogino and Miya in combination would teach wherein following the processing step, the method further comprising the step of changing the sampling rate back to the first sampling rate after the completion of processing the packet as to accurately measure the BER of the sampling position as taught by Miya (see col.6, lines 6-20).

As per claim 11, Pulley, Ogino and Miya in combination would teach wherein following the processing step, the method further comprising the step of stopping the

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processing of the packet and changing the sampling rate back to the first sampling rate after determining an erroneous detection as to accurately measure the BER of the sampling position as taught by Miya (see col.6, lines 6-20).

Allowable Subject Matter

6. Claims 15-21 are allowed over the prior art of record.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sourour et al U.S. patent No 6,157,820 teaches a pilot strength.

Fonte U.S. patent No 5,815,101 teaches a method and system for removing measuring aliased signals,

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272 3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM)
Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571 272 3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

7/9/2007

Emmanuel Bayard
Primary Examiner
Art Unit 2611

EMMANUEL BAYARD
PRIMARY EXAMINER